

(d) whether the Government have considered other alternative Hydro Electric Project of identical capacity within the country;

(e) whether the Government has satisfied itself that the Pancheshwar project enjoys advantages superior to alternative projects in India; and

(f) if so, the details therefor?

THE MINISTER OF STATE OF THE MINISTRY OF SCIENCE AND TECHNOLOGY AND MINISTER OF STATE OF THE MINISTRY OF POWER (SHRI YOGINDER K. ALAGH) : (a) Yes, Sir. India and Nepal had signed a Treaty on the Mahakali river on 29th January 1996. The Instruments of Ratification of the Treaty was exchanged during the Prime Minister's visit to Nepal in June, 1997. The Mahakali Treaty has come into force from 6.6.1997. A power exchange agreement was executed by the Secretary (Power) on behalf of Government of India in February, 1996.

The Mahakali Treaty envisages construction of the Pancheshwar Multipurpose Project on the river Mahakali which will be a source of surplus power. The Pancheshwar Multipurpose Project envisages construction of a storage dam, two underground power houses on either bank of the river. The project would be implemented in a phased manner and has a potential of about 6000 MW. However, a re-regulating structure would be required for exploiting the full power potential. A Detailed Project Report is under preparation.

A portion of Nepal's share of energy shall be sold to India. The quantum of such energy and its price shall be mutually agreed upon between the Parties.

(b) The estimated cost of the project as per the project report prepared by His Majesty's Government of Nepal for the installed capacity of 6480 MW is Rs. 9170 crores (1 US\$ = Rs. .35) including transmission based on April, 1996 price level.

(c) Both the parties i.e. India and Nepal shall jointly endeavour to mobilise the finance required for the implementation of the project after the preparation of Joint Detailed Project Report.

(d) to (f) Studies are being carried out in Central Electricity Authority (CEA) on power expansion model for the period (2011-2012 AD) when Pancheshwar Project is likely to yield benefits. In the studies all the existing sanctioned and ongoing and CEA cleared projects and all feasible hydroelectric projects upto the year 2012 have been taken into consideration. The result of the studies indicate that Pancheshwar power with the proposed tentative installation of 6000 MW is a cheaper alternative to the combination of coal based thermal and Open Cycle Gas Turbine plants or the combination of coal based thermal and pumped storage plants.

[Translation]

#### Drinking Water Projects of U.P.

1371. SHRI RAJENDRA AGNIHOTRI : Will the Minister of RURAL AREAS AND EMPLOYMENT be pleased to state :

(a) whether several drinking water projects of Uttar Pradesh are pending with the Union Government for special assistance from the World Bank;

(b) if so, the details thereof; and

(c) the details of such projects in rural areas of Uttar Pradesh which have recently been completed?

THE MINISTER OF RURAL AREAS AND EMPLOYMENT (SHRI KINJARAPPU YERRANNAIDU) : (a) No, Sir.

(b) Does not arise.

(c) A World Bank assisted project for Rural Water Supply and Environmental Sanitation covering 1000 villages in 15 Hill and Bundalkhand districts of Uttar Pradesh is under implementation at a total project cost of US\$ 71 million and the same is expected to be completed by 2002 A.D.

#### Encouragement to Non-Conventional Energy Sources in Bihar

1372. SHRI RAM KRIPAL YADAV : Will the Minister of NON-CONVENTIONAL ENERGY SOURCES be pleased to state :

(a) the steps taken so far to encourage the non-conventional energy sources in the country particularly in Bihar;

(b) the total amount spent thereon during the last three years;

(c) whether the Government are satisfied with the achievements made in this regard;

(d) if not, the reasons therefor;

(e) whether the Government make evaluation in this regard from time to time; and

(f) if so, the details thereof and the results of last evaluation made?

THE MINISTER OF STATE OF THE MINISTRY OF NON-CONVENTIONAL ENERGY SOURCES (CAPT. JAI NARAIN PRASAD NISHAD) : (a) The Ministry of Non-Conventional Energy Sources is implementing a wide range of programmes to generate and utilise non-conventional energy such as; the Integrated Rural Energy Programme (IREP), the setting up of Biogas plants, Improved Chulhas, Biomass Gasification and Briquetting plants, Solar Thermal Water Heating, both domestic and industrial, Solar Photovoltaic energy based rural home-lighting, lanterns, water pumps for irrigation and village level power plants, grid connected power

from Wind Energy, Small Hydro, Biomass Combustion, Bagasse-based Co-generation and Solar Photovoltaic Energy and electrical power from Urban and Industrial Wastes, throughout the country including in the State of Bihar.

(b) The total amount released by this Ministry to the State of Bihar, during the last three years, is Rs. 466.58 Lakhs.

(c) and (d) The Government is generally satisfied with the progress of utilisation of non-conventional energy sources in the state of Bihar. However, there is need to increase the coverage of potential and improve the functionality of Biogas plants and Improved Chulhas to bring it at par with the national average.

(e) Yes, Sir, the achievements made under various programmes of the Ministry, are reviewed from time to time.

(f) The details of the physical achievements for 1996-97 under various major programmes of the Ministry, in the State of Bihar, is given in the enclosed Statement.

#### Statement

*Physical Targets and Achievements under Major Renewable Energy Programme in the State of Bihar, for 1996-97*

S. No.	Name of the Programme	1996-97	
		Target	Achievement
1.	Biogas		
(i)	NPBD (Nos.)	2,815	682
2.	Improved Chulha (Nos.)	60,000	24,712
3.	Solar Lanterns (Nos.)	19,000	14,612
4.	SPV Water Pumping Systems (Nos.)	Not targets fixed	40
5.	Small Hydro Power Projects		
(i)	Portable Micro Hydel Sets (units of 10 KW each)	5	4
(ii)	Survey & Investigation	No targets fixed	24

NPBD = National Project on Biogas Development

KW = Kilo watt,

SPV = Solar Photovoltaic

[English]

#### Medicinal Value of Neem Tree

1373. SHRI K.P. SINGH DEO : Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state :

(a) whether the Government have any proposal to implement an action plan to undertake research on the medicinal value of Neem Tree;

(b) if so, the details thereof; and

(c) the States where research work has been started on Neem tree and its medicinal value?

THE MINISTER OF STATE OF THE MINISTRY OF SCIENCE AND TECHNOLOGY AND MINISTER OF STATE OF THE MINISTRY OF POWER (SHRI YOGINDER K. ALAGH) : (a) and (b) Various research and development institutions under the aegis of Council of Scientific and Industrial Research, Indian Council of Agricultural Research, Indian Council of Medical Research, Central Council for Research in Ayurveda and Sidha, Defence Research and Development Organization, Department of Biotechnology and University Grants Commission are pursuing research on the medicinal properties of neem tree. The major area covered include : the potential of neem oil and its fractions as a contraceptive; evaluation of the antimicrobial and immunomodulatory properties; micropropagation of elite planting material; in vitro production of therapeutic agents from cultured neem cells; isolation and characterization of active principle from neem bark for control of gastric hyperacidity and ulceration; assessment of genetic diversity in neem using molecular markers.

(c) The institutions with significant ongoing research work on neem are located in Andhra Pradesh, Delhi, Karnataka, Madhya Pradesh, Maharashtra, Tamil Nadu, Uttar Pradesh and West Bengal.

#### Closure of IVCOL

1374. SHRIMATI SUMITRA MAHAJAN : Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state :

(a) whether any decision to close Indian Vaccine Corporation Ltd. (IVCOL) has been taken; and

(b) if so, the reasons therefor?

THE MINISTER OF STATE OF THE MINISTRY OF SCIENCE AND TECHNOLOGY AND MINISTER OF STATE OF THE MINISTRY OF POWER (SHRI YOGINDER K. ALAGH) : (a) Yes, Madam, the Cabinet in its meeting dated 21-11-1995 approved that the Department of Biotechnology would initiate action for winding up and dissolution of IVCOL; and the additional cost, if any, alongwith other two partners is borne by DBT.

(b) This decision was taken because of the circumstances in which transfer of Vero Cell technology, the purpose for which primarily IVCOL was started in 1989, could not take place due to certain changes in policy to use only oral polio vaccine for eradication of polio in India instead of a combination of oral polio vaccine and injectible polio vaccine.